



# Office of the Assistant Secretary of Defense for Homeland Defense

**Homeland Defense**

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## *Defense Critical Infrastructure Program Overview*

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Office of the Assistant Secretary of Defense for Homeland Defense**

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# DoD Homeland Defense Functions Of ASD(HD)

## **Homeland Defense**

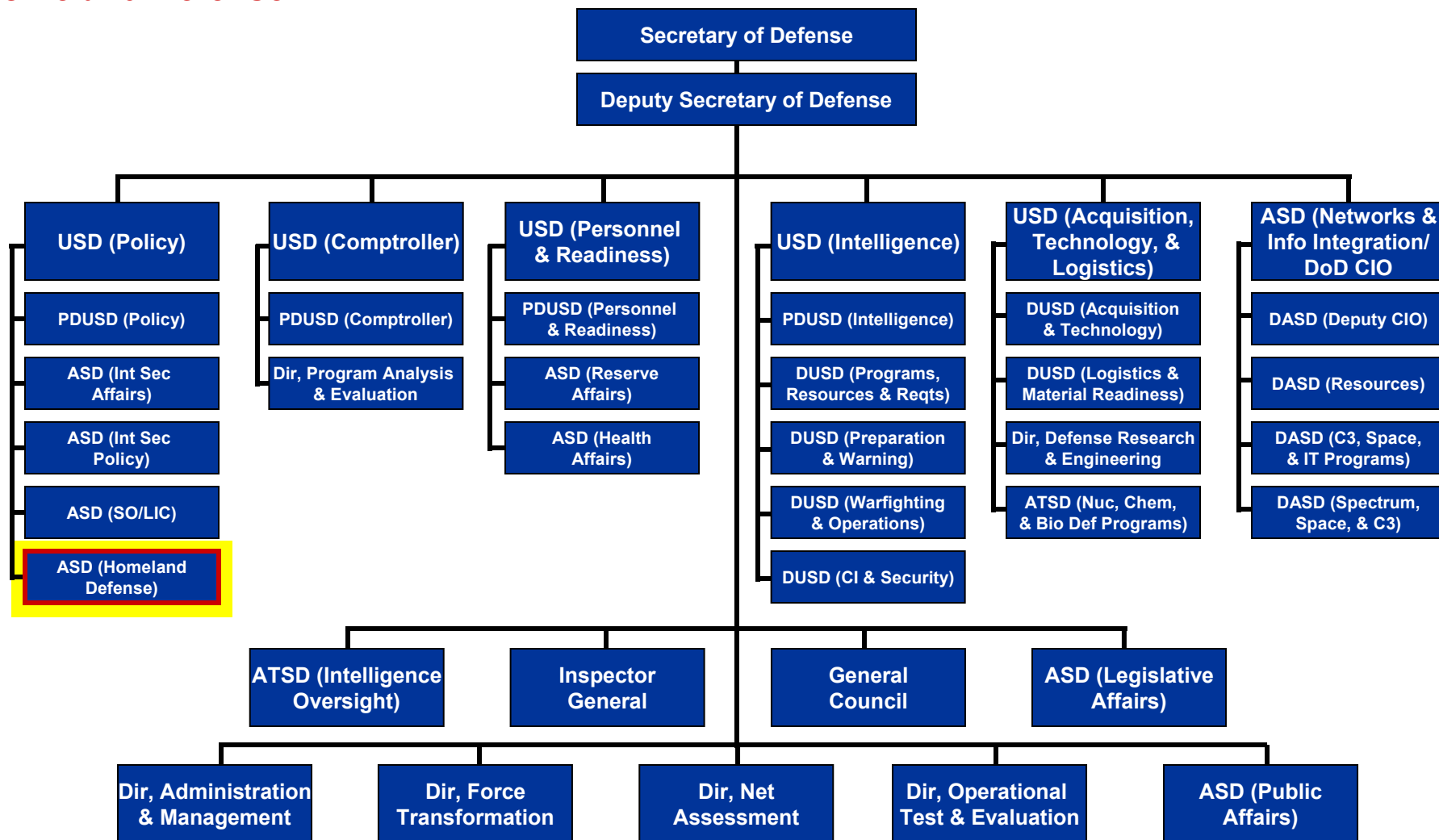
- **Overall supervision of the Homeland Defense activities of the DoD**
- **Develop strategic planning guidance for DoD's role in Homeland Security**
- **Develop Homeland Defense force employment policy and guidance**
- **Supervise DoD preparedness activities to support civil authorities in domestic emergencies**
- **Assist civil authorities in building and improving Federal, State, and local Homeland Security response capabilities**
- **Plan, train, and perform DoD domestic incident management**
- **Advocate Homeland Defense requirements within the DoD's resource allocation process**



# Defense Critical Infrastructure Program

## The OASD(HD) Within DOD

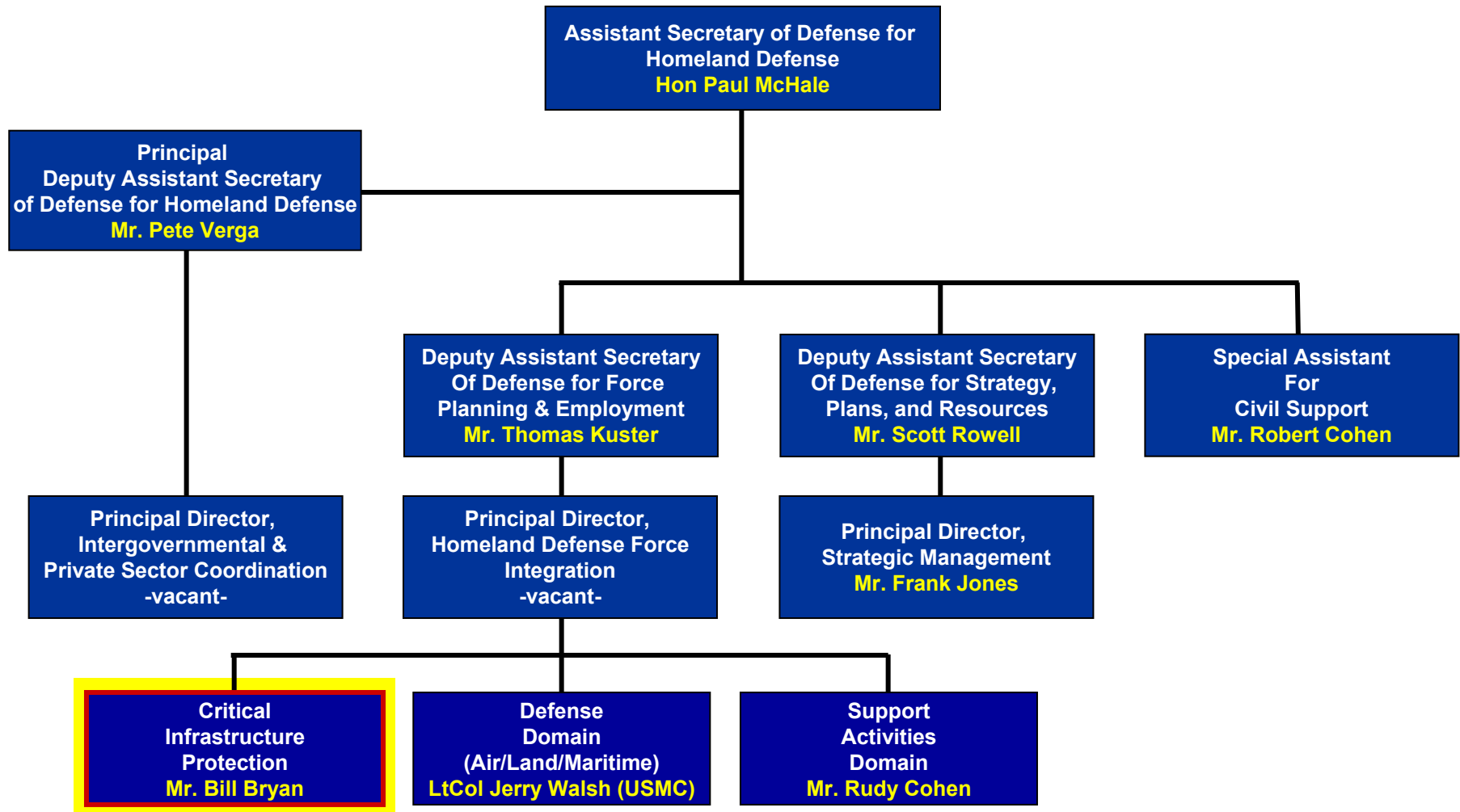
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# Defense Critical Infrastructure Program OASD(HD) Organization

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# Defense Critical Infrastructure Program Policy Background

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### DOD Directive 5160.54:

- Initial: “Key Asset Protection Program” (KAPP) – *Jun 89*
- Updated: “Critical Asset Assurance Program” (CAAP) – *Jan 98*

### DepSecDef Memoranda:

- Realigned CAAP into “Critical Infrastructure Protection” (CIP) under the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence - *Aug 99*
- Realigned CIP oversight to the Assistant Secretary of Defense for Homeland Defense – *Sep 03*

### DOD Directive 3020.xx

- “Defense Critical Infrastructure” – date TBD



# Defense Critical Infrastructure Program OSD Relationships (DoD Dir 3020.xx)

## Homeland Defense

*CIP  
Principal  
Staff  
Assistant*

*CIP "Sector"  
Principal  
Staff  
Assistant*

*CIP  
"Sector"  
Lead*

OASD(HD)

OUSD(Policy) -- *Space*

STRATCOM (acting)

OUSD(AT&L) -- *DIB*

DCMA (acting)

-- *Logistics*

DLA (acting)

-- *Transportation*

TRANSCOM (acting)

-- *Public Works*

USACE (acting)

OUSD(I) -- *ISR*

DIA (acting)

OUSD(C) -- *Finance*

DFAS (acting)

OUSD(P&R) -- *Health Affairs*

OASD(HA) (acting)

-- *Personnel*

DHRA (acting)

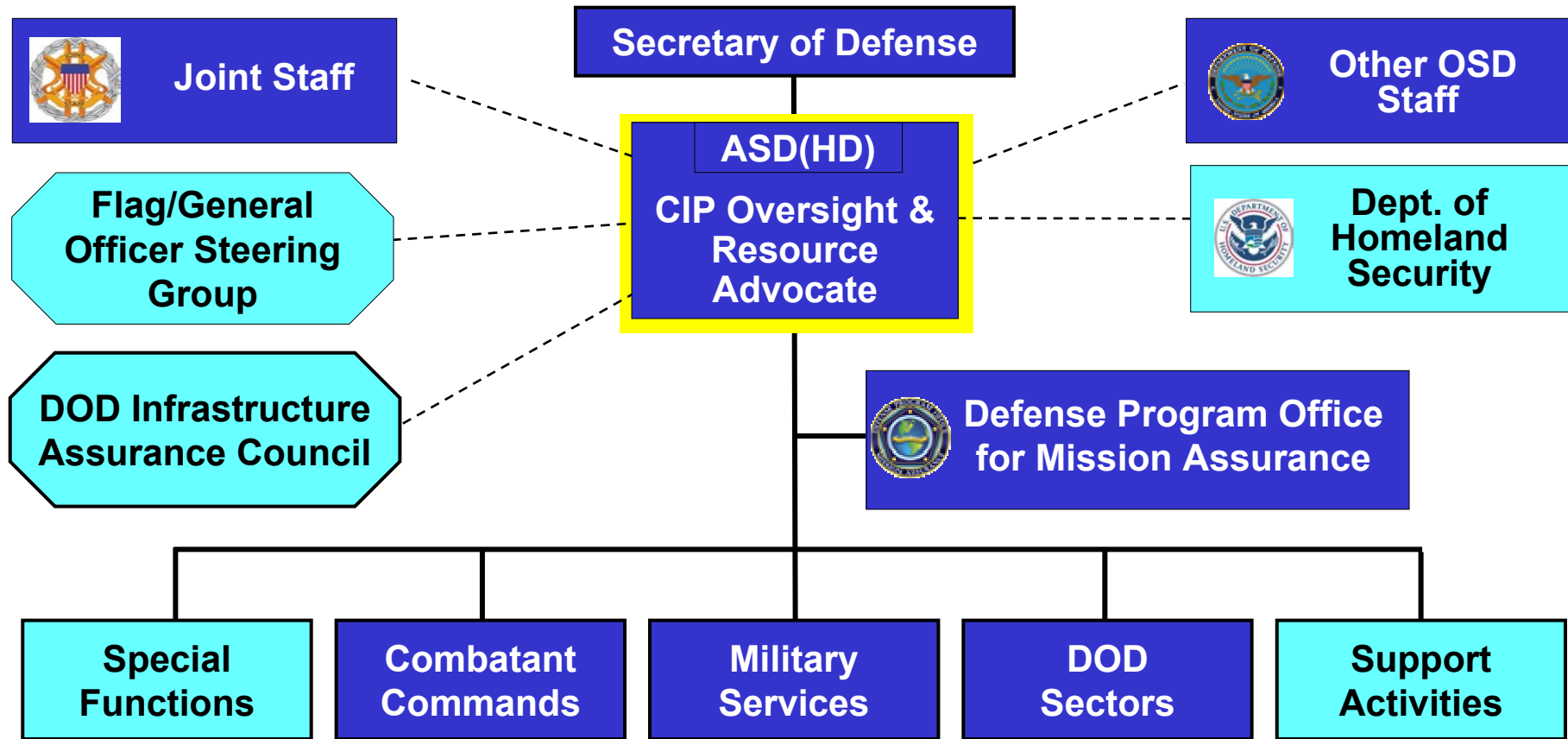
OASD(NII) -- *GIG*

DISA (acting)



# Defense Critical Infrastructure Program DOD Relationships

## Homeland Defense



- Addressed in Draft DoDD 3020.xx
- Relationships/partnerships addressed in later MOU's, Instructions, etc...



# Defense Critical Infrastructure Program General Approach

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## **DOD CIP Is About:**

- *Mission Assurance*
- *Understanding Interdependencies*
- *Effects-Based Defense*
- Global Support, From *Homeland Support Facilities* To *Forward Theater Of Operations*
- *Being Pro-Active And Dynamic*
- *Applying A Risk-Management Methodology*





# Defense Critical Infrastructure Program Analytic Construct

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**DOD CIP Is About Addressing Three Questions:**

*What Is Critical?*

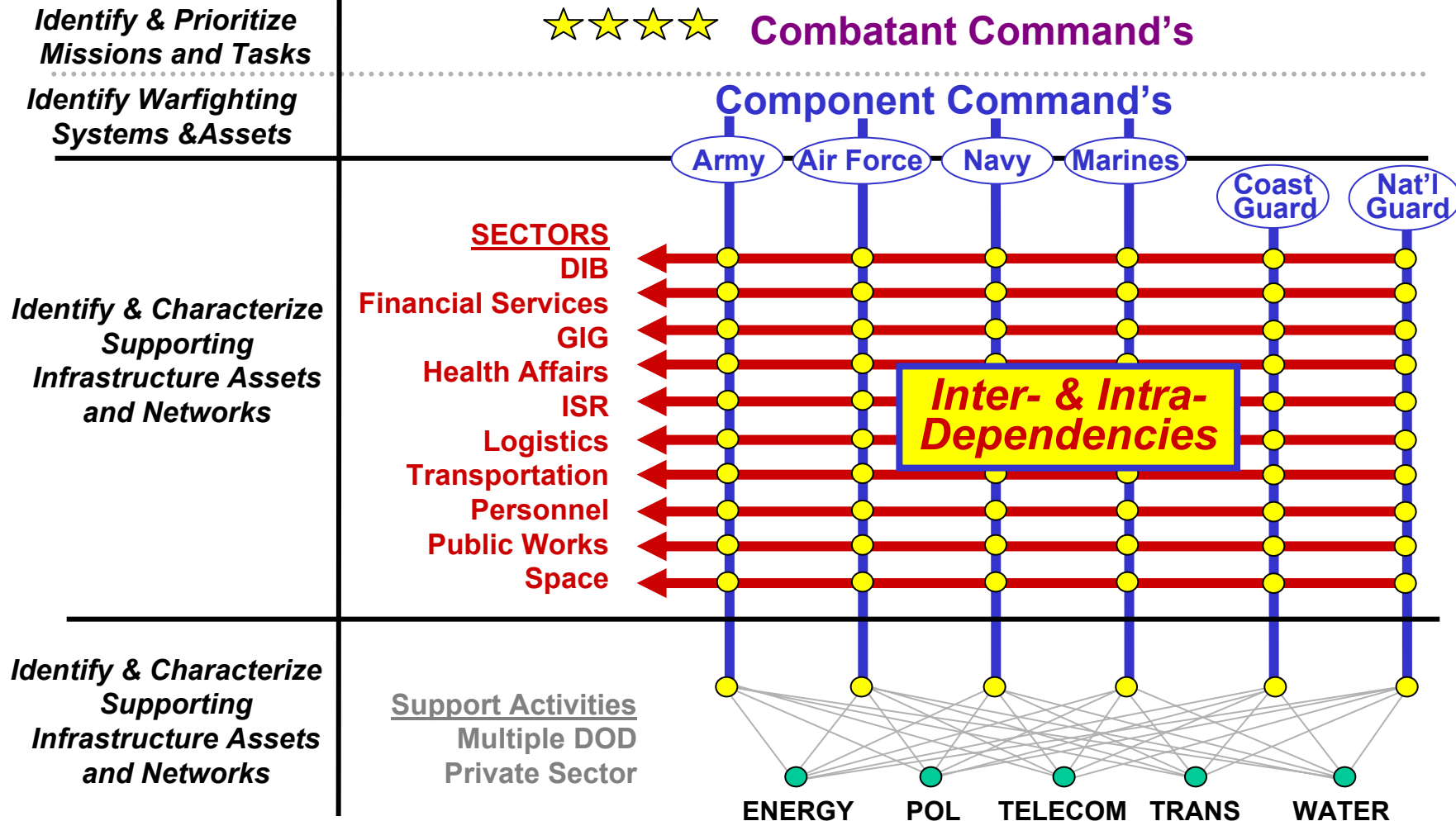
*Are Critical Assets Vulnerable?*

*What Can Be Done To Lower Risk?*



# Defense Critical Infrastructure Program Analytic Construct – cont.

## Homeland Defense





# Defense Critical Infrastructure Program

## What's Critical?

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### *CIP Mission Area Analysis (MAA)*

- Determine the **critical requirements** of mission owners.
- Determine the **mission required assets** that provide those capabilities.
- Calculate relative **critical index values** of mission required assets.
- Determine the **infrastructure support requirement** of identified mission required assets.

***MAA Must Be Imbedded In Mission  
“Owner’s” Mission Analysis Process...***



# Defense Critical Infrastructure Program Are Critical Assets Vulnerable?

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## *CIP Full Spectrum Integrated Vulnerability Assessment (FSIVA)*

**An assessment capability that will comprehensively, uniformly and consistently evaluate the vulnerabilities of critical physical and cyber assets that are essential to mobilize, deploy, and sustain U.S. military operations. This assessment will address the full range of CIP-related areas.**

### **CIP MODULES**

- Biological Security
- Chemical Security
- Commercial Relationships
- Countermeasure Recommendations
- Emergency Operations
- Industrial Security
- Information Security
- Nuclear Security
- Operational Security
- Personnel Security
- Plans
- Physical Security
- Safety
- Structural Response
- Supporting Infrastructure Networks
- Threats
- Weapons of Mass Destruction



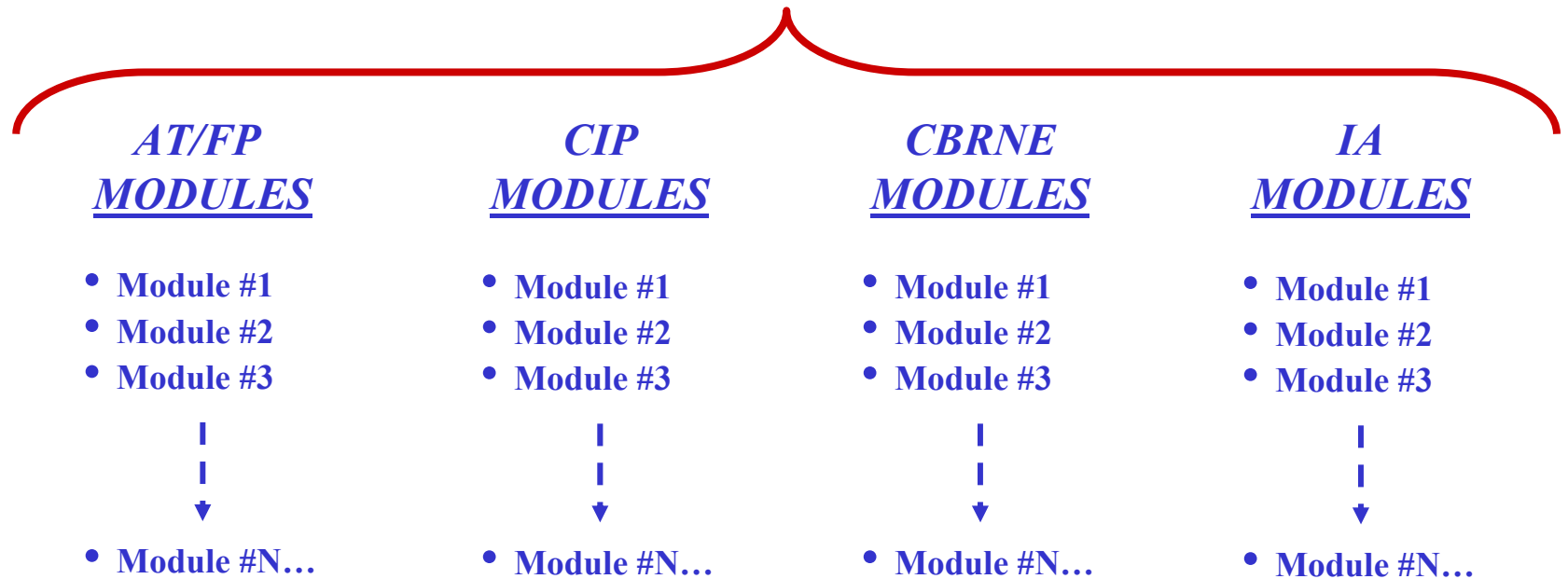
## Defense Critical Infrastructure Program

# Future – A Mission Assurance Construct

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## *Evolve Towards A “Mission Assurance” Environment*

### *FSIVA “Scope”:*



***Assessment Standards Across Community...***



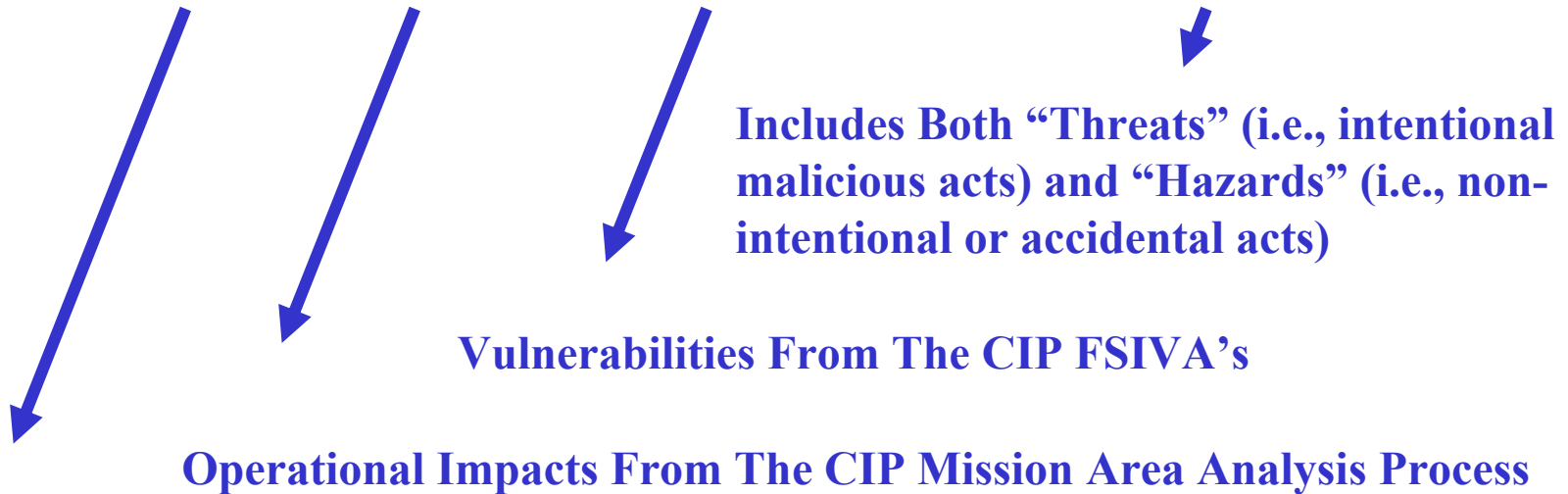
# Defense Critical Infrastructure Program

## What Can Be Done To Lower Risk?

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$$R = I * (V * T)$$

*Risk = Impact x (Vulnerability x Threat)*



CIP Risks Must Be Fully Addressed In The Planning, Programming, Budgeting & Execution System (PPBES)

***Goal: Risk Remediation or Mitigation...***



# Defense Critical Infrastructure Program Challenges & Issues

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## **DOD ISSUES:**

- **Dependence on commercial infrastructures to move, shoot, & communicate**
- **Assurance vs protection of critical infrastructures**
- **Homeland Defense, Homeland Security, and the “Defense Industrial Base”**
- **Critical infrastructure information**

## **DOD CHALLENGES:**

- **Data, analysis, and assessment standards**
- **Integration of data via GIS**
- **Information sharing**
- **CIP partnerships with Department of Homeland Security**



# Defense Critical Infrastructure Program Contact Information

## Homeland Defense



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# *Questions?*



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# ***Backup's & Reference***



# Defense Critical Infrastructure Program HLS & HD Paradigm<sup>1</sup>

## Homeland Defense



### Homeland Security<sup>1</sup>

A concerted national effort to prevent terrorist attacks within the US, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. (*Nat'l Strategy for Homeland Security*)

### Homeland Defense<sup>1</sup>

The protection of US sovereignty, territory, domestic population and critical defense infrastructure against external threats and aggression.

### Civil Support

DOD support to US civil authorities for domestic emergencies and for designated law enforcement and other activities. CS missions are undertaken by DOD when its involvement is appropriate and when a clear end state for the DOD role is defined.

### Emergency Preparedness<sup>1</sup>

Those planning activities undertaken to ensure DOD processes, procedures and resources are in place to support the President and Secretary of Defense in a designated National Security Emergency.



# Defense Critical Infrastructure Program

## HD and CS – When?

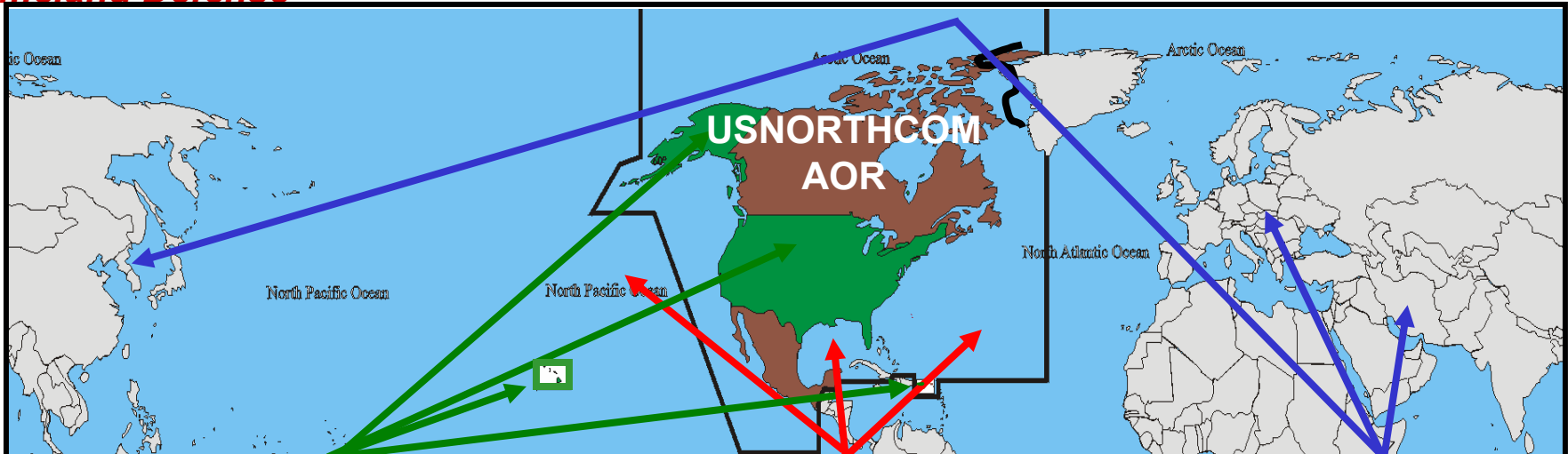
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- “***Extraordinary Circumstances***” – missions such as combat air patrols or maritime defense operations. DoD would take the lead in defending the people and the territory of our country, supported by other agencies. Included in this category are cases in which the President, exercising his constitutional authority as Commander in Chief and Chief Executive, authorizes military action to counter threats within the United States.
- “***Emergency Circumstances***” – such as managing the consequences of a terrorist attack, natural disaster, or other catastrophe in support of civil authorities, DoD could be asked to act quickly to provide capabilities that other agencies do not possess or that have been exhausted or overwhelmed.
- “***Non-Emergency Circumstances of Limited Scope or Planned Duration***” – DoD would support civil authorities where other agencies have the lead—for example, providing security at a special event such as the 2002 Winter Olympics, or assisting other federal agencies to develop capabilities to detect chemical, biological, nuclear, and radiological threats



# Defense Critical Infrastructure Program HD Strategic Construct<sup>1</sup>

## Homeland Defense



### **“Homeland”**

#### **Deter and Defend**

- Air & Space Defense
- Land Defense
- Maritime Defense
- Critical Defense Infrastructure Protection

### **“Approaches”**

#### **Detect and Defeat**

- Missile Defense
- Air Interdiction
- Maritime Interdiction

### **“Forward Regions”**

#### **Detect and Prevent**

- Deterrence
- Preemption
- Assure Allies
- Threat Reduction

**Homeland Defense Requires Seamless Geographical  
And Functional Integration**

<sup>1</sup>: As defined in DOD's Joint Operating Concept (JOC) for HLS, tasked by JROC, coordinated by Northcom (Draft)



# Defense Critical Infrastructure Program National Critical Infrastructures & Key Assets

## **Homeland Defense**

### **National Critical Infrastructure Categories:**

- ***Agriculture & Food***
- ***Water***
- ***Public Health***
- ***Emergency Services***
- ***Defense Industrial Base***
- ***Telecommunications***
- ***Energy***
- ***Transportation***
- ***Banking & Finance***
- ***Chemical Industry & Hazardous Materials***
- ***Postal & Shipping***

### **National Key Asset Categories:**

- ***National Monuments & Icons***
- ***Nuclear Power Plants***
- ***Dams***
- ***Government Facilities***
- ***Commercial Key Assets***



# Defense Critical Infrastructure Program

## DoD CIP Definitions<sup>1</sup>:

### Homeland Defense

**Asset (Infrastructure):** An infrastructure network element providing a unique service or capability. Assets are infrastructure network nodes (both physical and cyber) located either within or outside the U.S. and owned or operated by domestic or foreign and public or private sector organizations.

**Critical Asset:** An infrastructure asset of such extraordinary importance to DoD operations in peace, crisis, and war that its incapacitation or destruction would have a very serious, debilitating effect on the ability of the DoD to fulfill its missions.

**Defense Critical Infrastructure:** The DoD and non-DoD cyber and physical assets and associated infrastructure essential to project and support military forces worldwide.

**Defense Critical Infrastructure Program:** A risk-based approach to assure the availability of infrastructure assets critical to DoD mission assurance. The identification, assessment, and security enhancement of and physical and cyber assets essential to the execution of the National Military Strategy.

**Infrastructure:** The framework of interdependent physical and cyber-based systems comprising identifiable industries, institutions, networks, or distribution capabilities that enable a continued flow of goods and services essential to the defense and economic security of the U.S., the smooth functioning of Government at all levels, and society.





# Defense Critical Infrastructure Program DoD CIP Definitions<sup>1</sup> (cont.):

## Homeland Defense

**Mitigation:** Actions taken in response to a warning or incident intended to lessen the potentially adverse effects on a given military operation or infrastructure.

**Remediation:** Actions taken to correct known deficiencies and weaknesses. These actions are undertaken once a vulnerability has been identified.

**Sector:** A virtual association with the Defense Critical Infrastructure Program, that traverses organizational boundaries of defense assets or networks that perform a similar function within DoD, and are essential to the execution of the National Military Strategy.

**Threat:** Any indication, circumstance, or event with the potential to cause loss of or damage to an asset. It can be further defined as any intention and capability of an adversary to undertake actions that would be detrimental to critical assets.

**Vulnerability:** The characteristics of an installation, system, asset, application, or its dependencies that could cause it to suffer a definite degradation or loss (i.e., incapacity to perform the designated mission) as a result of having been subjected to a certain level of effects independent of whether it is disrupted by natural forces, technological failure, criminal, or hostile action.

**Vulnerability Assessment.** A systematic examination of the characteristics of an installation, system, asset, application, or its dependencies to identify vulnerabilities.





# Defense Critical Infrastructure Program DoD Sector Responsibilities<sup>1</sup>

## Homeland Defense

### *Defense Critical Infrastructure Sector Lead's Shall:*

- Establish and maintain a functional characterization of the Sector's support functions, systems, assets, and dependencies, as they relate to operational capabilities and assets identified by DoD Components
- Collaborate with other Sector Leads to identify cross-sector interdependencies
- Plan and coordinate with all DoD Components that own or operate elements of the Sector to identify, analyze, and assess the Sector's critical assets and their mission impacts
- Coordinate with all DoD Components that own or operate elements of the sector to develop and implement sector assurance plans